



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,654	12/21/2000	Michael Hannington	AVERP2850US	7505

7590 09/05/2003

Heidi A. Boehlefeld  
Renner, Otto, Boisselle & Sklar, L.L.P.  
19th Floor  
1621 Euclid Avenue  
Cleveland, OH 44115

EXAMINER
----------

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 09/05/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/742,654

Applicant(s)

HANNINGTON, MICHAEL

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 and 32-95 is/are pending in the application.
- 4a) Of the above claim(s) 53-95 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29, 32-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendments and remarks and Declaration filed on 7/23/2003. Applicant's amendment to claim 1 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The Declaration of Mr. Hannington appears to be defective because the table mentioned in section 6 is nowhere to be found. Also the Declaration appears to have confused "polymerization" as "curing" (or crosslinking) of polymer. The Examiner notes that while pressure sensitive adhesive are fully polymerized polymer, it cannot be fully cured (or crosslinked) polymer, as the curing would inherently restrict the mobility of polymer chain and render the adhesive non-tacky or non-adhesive (see cited Polymer Interface and Adhesion, S. Wu, p.339). It should also be noted that while the reference by Pocius (section 5 of Declaration) teaches in generally how pressure sensitive adhesive works, it makes no remarks indicating that pressure sensitive adhesive is typically fully cured. Finally, the Examiner notes that the missing table (section 6) seems to be directed to the curing of the adhesive after it is applied to the substrate so as to enhance the bonding at the interface, rather than the adhesive itself.
4. Rejections not maintained are withdrawn. In particular, upon reconsideration, the Examiner now believes that depending upon the printed thickness of the non-adhesive ink, it appears feasible to fully embed the print into the adhesive layer in a recessed

position. As such, the rejection under 35 U.S.C. 112, first paragraph, over claims 27-29 and 32-52 is withdrawn.

***Response to Amendment***

5. Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling, substantially for the reasons set forth in section 4 of Paper No. 13, together with the following additional observations.

It is noted that newly amended claim 1 now recites in part "a path for air egress to an end edge" to further clarify the instantly claimed invention.

As to the newly submitted Declaration by Mr. Hannington, the Examiner notes that while section 8 of the Declaration describes a conventional air egress process, section 9 still fails to provide sufficient reasoning as to the enablement for claims 1-26. It appears that Mr. Hannington's Declaration argues that any "standard adhesive tape" can be pushed by finger pressure so as to provide the claimed air egress property, but the description appears to be unrelated to the specific embodiment as shown in Figs. 3b and 3c of the instant invention. More specifically, the Declaration fails to provide any evidentiary support regarding how air egress channels of Fig. 3c can be formed by "finger pressure". Additionally, the Examiner notes that since the facestock is flexible (so as to be able to respond to finger pressure), it appears to be inherent for the air egress channel to collapse under pressure, and as such the argument that ""to remove an air bubble trapped between the adhesive and the substrate ... light finger pressure is applied to the air bubble ... causes the adhesive to dome up" into the channels created

Art Unit: 1771

by the embedded non-adhesive material forms" (Declaration, section 9) appears unlikely, i.e., the channel would have collapsed under pressure, and resulted in a process which is no more different than pushing an air bubble around under a "standard adhesive tape"; in other words, the non-adhesive material forms appear to be irrelevant to the "pushing" process.

The Examiner would like to again strongly urge Applicant provides Declaration(s) which focuses on the feasibility of how the adhesive can be pulled away from the substrate to form air egress routes as shown in Fig. 3c by a pressure, which also causes the non-adhesive material forms to collapse to the facestock permanently. The Examiner also would like to strongly suggest that the Declaration should be made by a relatively disinterested person such as, e.g., a customer, or supported by evidentiary experimental results.

6. Claims 27-29, 32-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rusincovitch et al. (US 5676787) in view of GB 1511060.

Rusincovitch's invention is directed to wall coverings, such as wallpaper which utilize a pressure sensitive adhesive and a means to minimize initial adhesion of the wall covering to a wall. In Fig. 6B, Rusincovitch teaches that the adhesive coating 116 is adhered to the substrate 112, and the non-adhesive spacers 118 are made of dried ink (Column 6, lines 39-41). The spacers 118 of Fig. 6B are typically flush with the adhesive layer 116 (column 9, lines 51-55). Rusincovitch also teaches that it is known art that printing can be carried out directly over the adhesive (column 3, lines 26-29).

For claims 27 and 36-37, it noted that Rusincovitch lacks an express teaching that the surface of the non-adhesive spacers is recessed below the surface of the adhesive layer. However, GB '060 is directed to a heat and pressure sensitive adhesive sheet, and GB '060 teaches that the surface of the adhesive layer is provided with one or more elongate ridges or recesses wherein at least one end of such ridge or recess intersects the end edge of the sheet, so as to improve the mechanism for degassing from between the bonded surfaces (page 1, column 2, lines 80-95). As such, it would have been obvious to one of ordinary skill in the art to modify Rusincovitch's pressure sensitive adhesive sheet to incorporate the recesses at the surface of the adhesive layer by printing and embedding the non-adhesive spacers into the adhesive layer and forms recessed ridges as taught by GB '060, motivated by the desire to be able to remove the air trapped between the bonded surfaces.

For claim 28, Rusincovitch teaches that typically, the spacers 18 of Figs. 2B and 4B have a thickness of about 0.05 mils to 0.50 mils ( $1\mu$  to  $10\mu$ ).

For claims 29 and 38, Rusincovitch teaches that anything that can be used as the ink on a printing machine can be used for fabricating the spacers so long as it is not sticky or tacky upon drying so that the spacers can slide over the surface of a wall (column 10, lines 30-39). As such, it is believed that an UV curable ink or a porous non-adhesive material is either inherently disclosed, or an obvious selection to one of ordinary skill in the art, motivated by the desire to obtain a non-adhesive surface.

For claims 32-35, Rusincovitch clearly shows in Fig. 8B that the non-adhesive spacers are applied as a plurality of circles (or dots). Further, GB '060 shows in Table 2

Art Unit: 1771

various dimensions of the ridges and in Fig. 5-3 a grid pattern of the ridges, which clearly read on the instantly claimed dimensions and patterns of non-adhesive material forms.

For claim 39, Rusincovitch teaches that the spacers can be made of organic polymeric material such as polyurethane, etc. (column 10, lines 30-39).

For claim 40, the Examiner notes that method of winding fails to patentably distinguish the invention as claimed.

For claims 41-50, Rusincovitch teaches a release liner 120 in Fig. 6B, and it is believed that various textured release surface with patterned finish and/or randomly printed embedded non-adhesive particulate is old and conventional. Further, it is believed that a pressure sensitive adhesive would inherently form a complementary textured surface to the release liner.

For claims 51-52, it is believed that forming double sided adhesive tapes are old and conventional, motivated by the desire to bond multiple substrate surfaces to form a laminate.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Application/Control Number: 09/742,654

Page 7

Art Unit: 1771

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC  
August 28, 2003

DANIEL ZIRKER  
PRIMARY EXAMINER  
GROUP ~~1300~~  
1700

*Daniel Zinker*